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|  | **KS1** | | **KS2** | | |
|  | **Year 1** | **Year 2** | **Year 3** | **Year 4** | **Year 5** | |
| **Planning investigations – ask questions** | * Ask simple questions | * Asking simple questions and recognising that they can be answered in different ways | * Ask more relevant questions about a topic. * Have more awareness of the different types of scientific enquiry. | * Ask relevant questions and use different types of scientific enquiries to answer them * Recognise when a fair test is necessary and introduce the terminology of variables. | * Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary * Begin to recognise why controlling variables is necessary. * Select the most appropriate type of scientific enquiry to answer questions. * Identify the variables within a test and explain why which ones need to be controlled and why. | |
| **Investigating and evidence collection – make observations and take measurements** | * Perform simple tests * Observe closely and use simple equipment * Identify and classify | * Performing simple tests * Observing closely, using simple equipment * Identifying differences, similarities or changes related to simple scientific ideas and processes | * Setting up simple practical enquiries, comparative and fair tests * Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers * Identifying differences, similarities or changes related to simple scientific ideas and processes | * Setting up simple practical enquiries, comparative and fair tests * Investigate, record data, analysing data, presenting findings * Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers * Identifying differences, similarities or changes related to simple scientific ideas and processes * Making systematic and careful observations | * Taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate | |
| **Recording .and presenting data – gather record and classify data** | * Gather and record data to help in answering questions * Describe how to identify and group different plants * Group and sort * Draw diagrams showing the parts of different plants, including trees * Compare and contrast familiar plants | * Using their observations and ideas to suggest answers to questions * Gathering and recording data to help in answering questions * Gathering and recording data to help in answering questions * Observing and recording, with some accuracy | * Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions * Recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts and tables | * Investigate, record data, analysing data, presenting findings * Recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables * Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions | * Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs | |
| **Evaluating and drawing conclusions – answer questions and make conclusions** | * Use observations and ideas to suggest answers to questions | * Using their observations and ideas to suggest answers to questions * Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions | * Using straightforward scientific evidence to answer questions or to support their findings * Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions * Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions * Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions | * Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions * Using straightforward scientific evidence to answer questions or to support their findings * Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions * Reporting on findings from enquiries, including oral and written explanations | * Identifying scientific evidence that has been used to support or refute ideas or arguments * Using test results to make predictions to set up further comparative and fair tests * Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other presentations | |